


Form PTO-1449		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. M122-2236	SERIAL NO. 10/609,311			
 <p>LIST OF ART CITED BY APPLICANT (Use several sheets if necessary)</p>				APPLICANT: Donald L. Yates				
				FILING DATE June 26, 2003	GROUP 2811 1754			
U.S. PATENT DOCUMENTS								
Examiner's Initials		Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate	
nm	AA	3,349,474	12/1963	D. H. Rauscher	438	10		
	AB	5,904,517	05/1999	Gardner et al.	438	197		
	AC	5,998,264	12/1999	Wu	438	260		
	AD	6,180,465 B1	01/2001	Gardner et al.	438	291		
	AE	6,207,485 B1	03/2001	Gardner et al.	438	216		
nm	AF	6,548,854 B1	04/2003	Kizilyalli et al.	257	310		
	AG							
nm	AH	2003/0045060 A1	03/2003	Ahn et al.	438	287		
nm	AI	2003/0045078 A1	03/2003	Ahn et al.	438	585		
FOREIGN PATENT DOCUMENTS								
		Document Number	Date	Country	Class	Subclass	Translation	
							Yes	No
nm	AJ	EP 0 851 473 A2	01/1998	EPO			X	
	AK							
	AL							
OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, Etc.)								
nm	AM	Chang et al., Silicon surface treatments in advanced MOS gate processing, Microelectronic Engineering, (2004), pages 130-135						
nm	AN	Lemberger et al., Electrical characterization and reliability aspects of zirconium silicate films obtained from novel MOCVD precursors, Microelectronic Engineering (2004), pages 315-320						
nm	AO	Lu et al., Effects of the TaN _x interface layer on doped tantalum oxide high-k films, VACUUM (2004), pages 1-9						
EXAMINER		DATE CONSIDERED 4/27/05						
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.								

Form PTO-1449		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. MI22-2236		SERIAL NO. 10/609,311	
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U.S. PATENT DOCUMENTS							
Examiner's Initials	Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate	
	AA						
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FOREIGN PATENT DOCUMENTS							
Document Number	Date	Country	Class	Subclass	Translation		
					Yes	No	

OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, Etc.)		
w3 w4	AM AN AO	Robertson et al., Atomic structure, band offsets, growth and defects at high-K oxide/Si interfaces, Microelectronic Engineering (2004) pages 112-120 Singh et al., High and Low Dielectric Constant Materials, The Electrochemical Society Interface, Summer 1999, pages 26-30

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				FILING DATE June 26, 2003	GROUP 2811 1754	
U.S. PATENT DOCUMENTS						
*Examiner's Initials	Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
	AA	4,086,074	04/78	Minot et al.	438	61
	AB	4,622,735	11/86	Shibata	438	303
	AC	4,683,645	08/87	Naguib et al.	438	530
	AD	4,693,910	09/87	Nakajima et al.	257	647
	AE	4,766,090	08/88	Coquin et al.	438	222
	AF	5,099,304	03/92	Takemura et al.	427	168
	AG	5,236,865	08/93	Sandhu et al.	438	297
	AH	5,444,024	08/95	Anjum et al.	438	143
nm	AI	5,470,784	11/95	Anjum et al.	65	31
FOREIGN PATENT DOCUMENTS						
Document Number	Date	Country	Class	Subclass	Translation	
					Yes	No
AJ						
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OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, Etc.)						
nm	AM	ABSTRACT: Basceri et al., Atomic Layer Deposition for Nanoscale CU Metalization, 10 pages (pre-April 2004).				
nm	AN	En et al., Plasma immersion ion implantation reactor design considerations for oxide charging, 85 SURFACE AND COATINGS TECHNOLOGY 64-69 (1966).				
nm	AO	Ku et al., The Application of Ion Beam Mixing, Doped Silicide, and Rapid Thermal Processing of Self-Aligned Silicide Technology, 137 J. Electrochem. Soc. No. 2, pp. 728-740 (February 1990).				
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U.S. PATENT DOCUMENTS							
*Examiner's Initials	Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate	
	AA	5,670,298	Hur	430	318		
	AB	6,037,239	Jennings	438	430		
	AC	6,096,621	Jennings	438	404		
	AD	6,130,140	Gonzalez	438	430		
	AE	6,133,105	Chen et al.	438	296		
	AF	6,133,116	Kim et al.	438	430		
	AG	6,156,674	Li et al.	438	780		
	AH	6,177,235 B1	Francou et al.	430	313		
	AI	6,281,100 B1	Yin et al.	438	585		
FOREIGN PATENT DOCUMENTS							
Document Number	Date	Country	Class	Subclass	Translation		
					Yes	No	
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OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, Etc.)							
	AM		ABSTRACT: How to Eliminate Voiding in Porous-Low-k Dielectrics and The Mechanism of Void Formation; Lin et al.; 4 pages				
	AN		COB Stack DRAM Cell Technology beyond 100 nm Technology Node; Yongjik Park & Kinam Kim; pp. 349.1 - 349.3;				
	AO		Rubin et al., Shallow-Junction Diode Formation by implantation of Arsenic and Boron Through Titanium-Silicide Films and ..., 17 IEEE Transactions on Electron Devices, No. 1, pp. 183-190 (January 1990).				
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LIST OF ART CITED BY APPLICANT (Use several sheets if necessary) <div style="font-size: 1.5em; margin-top: 20px;">2/30/04</div>				APPLICANT: Donald L. Yates			
				FILING DATE June 26, 2003		GROUP 2811 1754	

U.S. PATENT DOCUMENTS							
*Examiner's Initials	Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate	
<div style="font-size: 2em;">/</div>	AA	6,277,709 B1	08/01	Wang et al.	438	430	
	AB	6,277,728 B1	08/01	Ahn et al.	438	619	
	AC	6,291,363 B1	09/01	Yin et al.	438	769	
	AD	6,380,611 B1	04/02	Yin et al.	257	649	
	AE	6,383,723 B1	05/02	Iyer et al.	430	327	
	AF	6,440,793 B1	08/02	Divakaruni et al.	438	243	
	AG	6,465,325 B2	10/02	Ridley et al.	438	428	
	AH	6,720,638 B2	04/04	Tran	257	499	
	AI	6,780,728	08/04	Tran	438	243	
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	Document Number	Date	Country	Class	Subclass	Translation	
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OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, Etc.)							
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U.S. PATENT DOCUMENTS

*Examiner's Initials	Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
	AA	2001/0006759 A1	07/01	Shipley, Jr. et al.	430 280.1	
	AB	2002/0076879 A1	06/02	Lee et al.	438 241	
	AC	2002/0196651 A1	12/02	Weis	365 100	
	AD	2003/0013272 A1	01/03	Hong et al.	438 437	
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FOREIGN PATENT DOCUMENTS

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<div style="position: relative; height: 40px;"> 7/30/04 LIST OF ART CITED BY APPLICANT <small>(Use several sheets if necessary)</small> </div>				APPLICANT: Donald L. Yates			
				FILING DATE June 26, 2003		GROUP 2811 1756	
U.S. PATENT DOCUMENTS							
*Examiner's Initials	Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate	
WZ	AA	10/655,997	Daley			09/03	
WZ	AB	10/689,958	Basceri			10/03	
WZ	AC	10/690,029	Derderian et al.			10/03	
WZ	AD	10/882,118	Sandhu et al.			04/04	
WZ	AE	10/879,367	Blalock et al.			06/04	
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				FILING DATE June 26, 2003	GROUP 2811 1254		
U.S. PATENT DOCUMENTS							
*Examiner's Initials	Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate	
nm	AA 10/932,218		Basceri et al.			09/01/2004	
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				FILING DATE June 26, 2003	GROUP 2811-1756	
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U.S. PATENT DOCUMENTS						
Examiner's Initials	Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
<div style="font-size: 24px; font-weight: bold;">WJ</div> <div style="border-left: 1px solid black; height: 100px; margin-left: 10px;"></div>	AA	6,753,618	06/2004	Basceri et al.	257	915
	AB	5,470,794	11/1995	Anjum et al.	437	200
	AC	2003/0219942 A1	11/2003	Choi et al.	438	253
	AD	2004/0245560 A1	12/2004	Pontoh et al.	257	309
	AE	2004/0245559 A1	12/2004	Pontoh et al.	257	306
	AF	2004/0046197 A1	03/2004	Basceri et al.	257	296
	AG	2004/0043228 A1	03/2004	Derderian et al.	428	446
	AH	2003/0213987 A1	11/2003	Basceri et al.	257	296
<div style="font-size: 24px; font-weight: bold;">WJ</div>	AJ	2003/0205729 A1	11/2003	Basceri et al.	257	200
FOREIGN PATENT DOCUMENTS						
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